

ABSTRACT

Scheduler 304 performs scheduling such that the communication terminal apparatuses to transmit packets to are determined according to the order in CIR information output
5 from demodulator 303, and determines the modulation schemes and coding rates of the packets. Command detector 305 detects an ARQ command transmitted from the communication terminal apparatus determined in scheduler 304, outputs an ACK/NACK signals to buffer 306, and outputs a SUSPEND signal or a GIVEUP
10 signal to scheduler 304. Scheduler 304 stops retransmission upon receiving a SUSPEND signal or a GIVEUP signal from command detector 305, and redoes the scheduling. Thus, it is possible to improve overall system throughput in a wireless communication system that performs packet transmission.

FIG.1

102 RF RECEIVER
 103 DEMODULATOR
 104 COMBINER
 5 105 BUFFER
 106 ERROR CORRECTION DECODER
 107 ERROR DETECTOR
 (108) RECEIVING DATA
 109 SIR MEASURER
 10 110 SIR DETERMINER
 111 COMMAND GENERATOR
 112 CIR MEASURER
 113 CIR INFORMATION GENERATOR
 114 MODULATOR
 15 115 RF TRANSMITTER

FIG.2

PACKET
 COMMAND
 20 TIME

FIG.3

PACKET DATA #1 OF PARTNER STATION
 PACKET DATA #2 OF PARTNER STATION
 25 PACKET DATA #n OF PARTNER STATION
 COMMON CONTROL CHANNEL
 302 RF RECEIVER

- 303 DEMODULATOR
- 304 SCHEDULER
- 305 COMMAND DETECTOR
- 306 BUFFER
- 5 307 ERROR CORRECTION ENCODER
- 308 MODULATOR
- 309 MODULATOR
- 310 RF TRANSMITTER

- 10 **FIG.5**
- 102 RF RECEIVER
- 103 DEMODULATOR
- 104 COMBINER
- 105 BUFFER
- 15 106 ERROR CORRECTION DECODER
- 107 ERROR DETECTOR
- (108) RECEIVING DATA
- 109 SIR MEASURER
- 110 SIR DETERMINER
- 20 112 CIR MEASURER
- 113 CIR INFORMATION GENERATOR
- 114 MODULATOR
- 115 RF TRANSMITTER
- 501 COMMAND GENERATOR
- 25 COUNTING FUNCTION